

**Claim 160 (new)** The compound of claim 16 wherein the compound consists essentially of a 7 to 17 residue peptide according to formula (II).

## **REMARKS**

Claims 1, 2, 4, 5, 8, 9, 13, 14, 16, 17, 19, and 136-139 remain pending. The Office has allowed or acknowledged allowability of claims 1, 4, 8, and 136-139. The Office has rejected claims 5, 9, 16, 17, and 19 and objected to claims 2, 5, 13, 14, and 19. New claims 159 and 160 have been added.

Claim 2 has been cancelled. Claim 19 has been amended to remove reference to cancelled claim 2. Claim 5 has been rewritten in independent form, incorporating relevant features from claim 1 and claim 4, from which it formerly depended. Support for the amendment to claim 5 is found in claims 1 and 4 and in the specification at p. 6, ln. 7-17. Claims 5, 9, and 16 have been amended to remove reference to "analog."

Support for new claim 159 and 160 is found in claims 1 and 16, respectively. from which they depend.

## **OBJECTION UNDER 37 C.F.R. 1.75(c)**

Applicant respectfully traverses the rejection of Claims 2, 5, 13, 14, and 19 for not further limiting a claim upon which they depend and requests the Office to withdraw its rejections.

As suggested by the Office, claim 5 has been rewritten in independent form. Therefore the Office's rejection based upon claim 5 not further limiting claim 1 is moot. Although claim 5 has been amended, Applicant respectfully asserts that SEQ ID NO: 1 of claim 5 does fit within a subsection of claim 1. SEQ ID NO: 1 consists of Asn-Val-Leu-Gln-Ile-Ala-Leu. This sequence fits within claim 1 where X<sub>1</sub> is any amino acid (Asn), X<sub>2</sub> is any amino acid (Val), X<sub>3</sub> is a hydrophobic residue (Leu), X<sub>4</sub> is any amino

acid (Gln),  $X_5$  is a hydrophobic amino acid (Ile),  $X_6$  is a hydrophobic amino acid (Ala), and  $X_7$  is a hydrophobic amino acid (Leu).

Claim 13, specifically with regard to  $X_3$ , further limits claim 1. The specification makes it clear that "amino acids having side chains exhibiting two or more physical-chemical properties can be included in multiple categories."<sup>1</sup> In claim 1,  $X_3$  can be a hydrophobic residue or a hydroxyl-substituted aliphatic residue. Claim 13 further limits  $X_3$  to either an aliphatic residue or T.

"Aliphatic residue" of claim 13 limits the more general "hydrophobic residue" of claim 1. The specification describes an "aliphatic amino acid" as a hydrophobic amino acid having an aliphatic hydrocarbon side chain and includes the genetically encoded aliphatic amino acids Ala (A), Val (V), Leu (L) and Ile (I).<sup>2</sup> Each of these aliphatic amino acids is reflected in the larger list of "hydrophobic amino acids" in the specification.<sup>3</sup> Furthermore, "T" of claim 13 limits the more general "hydroxyl-substituted aliphatic residue" of claim 1. The specification states that "hydroxyl-substituted aliphatic amino acids" are hydrophilic polar amino acids having a hydroxyl-substituted side chain and provides as examples Ser (S) and Thr (T).<sup>4</sup> Therefore, claim 13 further limits claim 1.

The Office objects to claim 14 as dependent from rejected claim 13. It is demonstrated above that claim 13 further limits claim 1, thus making the rejection of claim 14 moot.

The Office objects to claim 19 as dependent upon rejected claims 2, 5, and 13. Claim 19 has been amended to remove reference to cancelled claim 2. Further, claim 5 has been written in independent form, and it is demonstrated above that claim 13 further limits claim 1. Therefore, claim 19 contains no objectionable subject matter.

---

<sup>1</sup> Specification, p. 17, ln. 25-26.

<sup>2</sup> Specification, p. 17, ln. 9-11.

<sup>3</sup> Specification, p. 16, ln. 19-22 ("Genetically encoded hydrophobic amino acids include Pro (P), Ile (I), Phe (F), Val (V), Leu (L), Trp (W), Met (M), Ala (A), Gly (G) and Tyr (Y).").

<sup>4</sup> Specification, p. 17, ln. 12-14.

**REJECTION UNDER 35 U.S.C. §112, SECOND PARAGRAPH**

Applicant traverses the rejection of claims 5, 9, 16, 17, and 19 for being vague and indefinite and requests the Office to withdraw its rejections. Claims 5, 9, and 16 have been amended to remove reference to "analog" thus making the Office's rejection moot. As claims 17 and 19 were rejected for dependency upon claim 16, these rejections are also moot.

**INFORMALITIES**

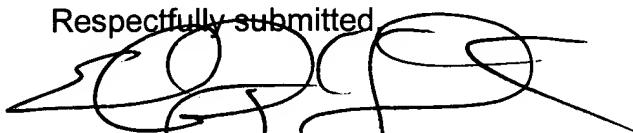
Applicant thanks the Office for drawing attention to the impermissibility of browser-executable code in the specification. The specification has been amended to remove embedded hyperlinks.

**CONCLUSION**

Applicants request an entry of the specification and claim amendments and solicit allowance of all pending claims. The Office is invited to contact the undersigned attorney should any issue remain unsolved.

The Commissioner is hereby authorized to charge any underpayment and credit any overpayment of government fees to Deposit Account No. 19-1345.

Respectfully submitted,



Edward J. Hejlek, Reg. No. 31,525  
SENNIGER POWERS  
One Metropolitan Square, 16th Floor  
St. Louis, Missouri 63102  
(314) 231-5400

EJH/DJH/Irw